

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

**RESEARCH FRONTIERS
INCORPORATED,**

Plaintiff,

v.

**E INK CORPORATION;
E INK HOLDINGS INC. (f/k/a PRIME
VIEW INTERNATIONAL CO., LTD.);
AMAZON.COM, INC.;
SONY ELECTRONICS INC.;
SONY CORPORATION;
BARNES & NOBLE, INC.; and
BARNESANDNOBLE.COM LLC**

Defendants.

Case No. 1:13-cv-01231-LPS

DECLARATION OF NICHOLAS K. SHERIDON

I, Nicholas K. Sheridan, declare as follows:

1. I have been retained on behalf of Research Frontiers Inc. as an expert in the above-captioned case.
2. I am being compensated for my work on this case, and my compensation is not dependent on the outcome of the case or any motion or proceeding within the case.
3. In 1957 I received a bachelor's degree in Physics from Wayne State University in Detroit.
4. In 1960 I received a master's degree in Physics from Wayne State University in Detroit.
5. From 1967 to 2006 I was a research scientist at Xerox Corporation. A particular focus of my work was technology for controlling light using particles in a liquid suspending medium.
6. My resume is attached to this declaration as Exhibit A.
7. I am a named inventor on 90 U.S. patents of which 59 patents relate to technology for controlling light using particles in a liquid suspending medium, specifically electronic ink and electronic paper.

8. I invented a type of electronic paper called Gyricon in 1974. Gyricon consists of a thin layer of transparent polymer that contains a dispersion of small spheres encased in oil. The hemispheres of these particles contain different colored pigments and permanent electrical charges. When an electrical field is applied, the particles rotate or twist in response to the electrical field to display either one color or the other to a viewer.

9. It is my opinion that the terms “electrophoresis” and “electrophoretic” refer to the movement of particles in a liquid suspending medium upon the application of an electrical field.

10. It is my further opinion that the types of movement referred to by the terms “electrophoresis” and “electrophoretic” are not limited to movement of a particular nature, such as rotation or translation. In other words, the types of movement characterized by the terms “electrophoresis” and “electrophoretic” include but are not limited to translation, rotation, migration and orientation.

11. I do not understand the term “light valve” to be limited to devices that control light transmission through the rotational movement of particles. Rather I understand “light valve” as generally encompassing any device with two spaced-apart walls, having electrodes thereon, and light modulating means therein. Such light modulating means includes but is not limited to the motion of particles, the motion of a deformable surface and the change in the refractive index of a translucent material.

12. It is my opinion that the patents-in-suit describe light valves.

13. It is my opinion that Gyricon is also a light valve.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated: 28 August 2015

Nicholas K. Sheridan
Nicholas K. Sheridan